

# Summary of Onsite Wastewater Treatment Systems

Kentucky River ADD Planning Area

September, 2001

## **KENTUCKY RIVER ADD PLANNING AREA**

- Estimated 1999 population of 125,000--82% on onsite treatment
- Estimated 2020 population of 127,000--69% on onsite treatment

The Kentucky River Area Development District region had an estimated population of 124,770 (47,819 households) in 1999 with a projected population of 127,000 (54,000 households) in 2020. Onsite wastewater treatment systems serve 102,000 area residents, or 82 percent of the population. It is estimated that nearly 88,000 people in the planning area will rely on onsite systems in 2020.

Estimated populations and public sewer service for the eight counties in the region is given below:

| <b>County</b> | <b>1999 Pop</b> | <b>Onsite Treatment</b> | <b>2020 Pop</b> | <b>Onsite Treatment</b> |
|---------------|-----------------|-------------------------|-----------------|-------------------------|
| Breathitt     | 15,600          | 12,200 (78%)            | 16,800          | 12,600 (75%)            |
| Knott         | 17,500          | 16,625 (95%)            | 17,300          | 15,600 (90%)            |
| Lee           | 7,900           | 7,100 (90%)             | 8,200           | 6,600 (80%)             |
| Leslie        | 13,400          | 13,000 (97%)            | 12,800          | 11,500 (90%)            |
| Letcher       | 26,500          | 20,400 (77%)            | 25,800          | 12,900 (50%)            |
| Owsley        | 5,300           | 4,500 (85%)             | 5,600           | 4,200 (75%)             |
| Perry         | 31,100          | 21,800 (70%)            | 32,100          | 17,700 (55%)            |
| Wolfe         | 7,500           | 6,900 (92%)             | 8,750           | 7,000 (80%)             |
| Planning Area | 125,000         | 102,000 (82%)           | 127,000         | 88,000 (69%)            |

## **BREATHITT COUNTY**

- Estimated 1999 population of 15,600--78% on onsite systems
- Estimated 2020 population of 16,800--75% on onsite systems

Breathitt County had an estimated population of 15,563 (5,938 households) in 1999 with a projected population of 16,800 (7,200 households) in 2020. About 4,600 households in the county use on-site wastewater treatment. An estimated 5,400 households will rely on onsite systems in 2020.

It is estimated that about 50 percent of those not on public sewer have straight pipes and the remainder have traditional septic tanks.

## **KNOTT COUNTY**

- Estimated 1999 population of 17,500--95% on onsite systems
- Estimated 2020 population of 17,300--90% on onsite systems

About 6,200 households in the county use on-site wastewater treatment. An estimated 5,500 households will rely on onsite systems in 2020.

### **LEE COUNTY**

- Estimated 1999 population of 7,900--90% on onsite systems
- Estimated 2020 population of 8,200--80% on onsite systems

Lee County had an estimated population of 7,935 (3,306 households) in 1999 with a projected population of 8,200 (3,600 households) in 2020. About 3,000 households use on-site systems. An estimated 2,900 households will rely on onsite systems in 2020.

### **LESLIE COUNTY**

- Estimated 1999 population of 13,400--97% on onsite systems
- Estimated 2020 population of 12,800--90% on onsite systems

Leslie County had an estimated population of 13,390 (4,900 households) in 1999 with a projected population of 12,800 (5,500 households) in 2020. About 4,700 households in the county use on-site treatment systems. An estimated 5,000 households will rely on onsite systems in 2020.

### **LETCHER COUNTY**

- Estimated 1999 population of 26,500--77% on public sewer
- Estimated 2020 population of 25,800--50% on public sewer

Letcher County had an estimated population of 26,479 (10,240 households) in 1999 with a projected population of 25,800 (11,300 households) in 2020. About 7,900 households treat wastewater on site. An estimated 5,700 households will rely on onsite systems in 2020.

The two big problems facing the county are the number of straight pipes and failing septic systems. A lot of homes from the old coal camps are built on lots too small for traditional septic systems, and in many parts of the county the soil is unsuitable for proper percolation of septic fields.

Letcher County is taking action on these problems. Local municipalities are working with the County Water and Sewer District to extend services to areas that can be served by traditional means, while the Water and Sewer District is pursuing alternative methods of treatment such as individual peat and cluster systems for areas well outside current municipal boundaries. The District has located several areas that appear to be suitable for cluster systems, but no specific site for expansions are planned because they need to coincide with future water expansions. A long range solution that has been

discussed is a large plant to be located in the Cowan area. Working in conjunction with the Neon plant, the entire Boone Fork and the headwaters of the North Fork of the Kentucky River would be served. Also, The Letcher County Fiscal Court recently passed a mandatory sewer ordinance.

### **OWSLEY COUNTY**

- Estimated 1999 population of 5,300--85% on onsite treatment systems
- Estimated 2020 population of 5,550--75% on onsite treatment systems

Owsley County had an estimated population of 5,327 (2,170 households) in 1999 with a projected population of 5,550 (2,450 households) in 2020. About 1,900 households treat wastewater on site. An estimated 1,800 households will rely on onsite systems in 2020.

### **PERRY COUNTY**

- Estimated 1999 population of 31,100--70% on onsite treatment systems
- Estimated 2020 population of 32,100--55% on onsite treatment systems

Perry County had an estimated population of 31,102 (11,673 households) in 1999 with a projected population of 32,100 (13,400 households) in 2020. About 8,200 households treat wastewater on site. An estimated 7,400 households will rely on onsite systems in 2020.

### **WOLFE COUNTY**

- Estimated 1999 population of 7,500--92% on onsite treatment systems
- Estimated 2020 population of 8,750--80% on onsite treatment systems

Wolfe County had an estimated population of 7,503 (2,960 households) in 1999 with a projected population of 8,750 (3,650 households) in 2020. About 2,700 of the county's households treat wastewater on site. An estimated 2,900 household will rely on onsite systems in 2020.